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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,536

06/15/2006

Ja Yeon Cho

09983.0154USWO

3164

23552 7590 04/28/2009
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

ROGERS, MARTIN K

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

04/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,536	Applicant(s) CHO, JA YEON	
	Examiner MARTIN ROGERS	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,8,11,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 11, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/09 5/30/2008 and 6/15/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 7, 9-10, and 12-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected PET container and the method of its manufacture, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/5/2009. Based on applicant's amendments, amended claims 1-3, as well as newly added claims 22 and 23 will be examined along with elected claims 6, 8 and 11.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinichi et al. (Japanese Kokai JP8323845 already of record) in view of Uhlig (USP 3740181) and Hagano et al. (Pre-Grant Publication 2002/0125254).

In regards to claim 1, Shinichi discloses an apparatus for manufacturing a PET ([0004]) container (Figure 14) comprising a blow mold that has a handle forming portion for compressing both sides of a bottle to form the handle (Figure 12), a conveyor that conveys the preform by clamping its neck (Figure 12: 82), an apparatus for creating a

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hole in the compressed handle area ([0096]), and a bonding apparatus for bonding a cut-off portion remaining in the handle section after cutting off the compressed portion of the handle section (Figure 17). In the invention of Shinichi, the apparatus used to form a hole in the handle area is not disclosed and the unbonded flanges of the handle area are sealed by using ultrasonic welding of a prefabricated piece ([0099] and [0100]).

Uhlig discloses that when blow molding a handled container, it is beneficial to have an intermediate blowing step in which the parison is blow molded into a cavity that creates a shape which allows the handle section to be compressed (Figure 12) for the benefit of creating a desirable amount of biaxial stretching in the handled container. (Column 1, lines 45-49). Uhlig further discloses that it was well known in the art at the time of the invention to use a mold punch (Figure 17) to remove the compressed portion of a container handle.

Hagano discloses that it was known in the art to injection mold around the seam of a blow molded container by compressing the cut-off portion and overmolding the edges with an injection resin ([0090]). One of ordinary skill in the art at the time of the invention would have realized that by injection molding the sealing member directly onto the container of Shinichi rather than prefabricating it and then welding it in place, the amount of equipment and the production time of the process would be reduced.

Therefore, in order to create a biaxially stretched container while saving on equipment costs and processing time, one of ordinary skill in the art would have found it obvious to use the preliminary blow molding step taught by Uhlig to create the container disclosed by Shinichi, cut the compressed portion of the container taught by Shinichi

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with the punch disclosed by Uhlig, and then bond the cut-off portions with the injection mold taught by Hagano.

In regards to claim 6, Shinichi discloses a method for manufacturing a PET ([0004]) container (Figure 14) comprising the steps of blow molding a preform in a cavity (Figure 12) that has a handle forming portion for compressing both sides of the bottle to form the handle section (Figure 12), conveying the preform by clamping its neck (Figure 12: 82), creating a hole in the compressed handle area ([0096]), and using a bonding apparatus for bonding a cut-off portion remaining in the handle section after cutting off the compressed portion of the handle section (Figure 17). In the invention of Shinichi, the apparatus used to form a hole in the handle area is not disclosed and the unbonded flanges of the handle area are sealed by using ultrasonic welding of a prefabricated piece ([0099] and [0100]).

Uhlig discloses that when blow molding a handled container, it is beneficial to have an intermediate blowing step in which the parison is blow molded into a cavity that creates a shape which allows the handle section to be compressed (Figure 12) for the benefit of creating a desirable amount of biaxial stretching in the handled container (Column 1, lines 45-49). Uhlig further discloses that it was well known in the art at the time of the invention to use a mold punch (Figure 17) to remove the compressed portion of a container handle.

Hagano discloses that it was known in the art to injection mold around the seam of a blow molded container by compressing the cut-off portion and overmolding the

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edges with an injection resin ([0090]). One of ordinary skill in the art at the time of the invention would have realized that by injection molding the sealing member directly onto the container of Shinichi rather than prefabricating it and then welding it in place, the amount of equipment and the production time of the process would be reduced.

Therefore, in order to create a biaxially stretched container while saving on equipment costs and processing time, one of ordinary skill in the art would have found it obvious to use the preliminary blow molding step taught by Uhlig to create the container disclosed by Shinichi, cut the compressed portion of the container taught by Shinichi with the punch disclosed by Uhlig, and then bond the cut-off portions with the injection mold taught by Hagano.

4. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uhlig (USP 3740181) in view of Mojonnier et al. (USP 3366290) and Hagano et al. (Pre-Grant Publication 2002/0125254).

In regards to claim 1, Uhlig discloses an arrangement for manufacturing a bottle having a handle formed on a body (Figure 14) which comprises a first preform blow mold for blowing air into a preform so that a section is created for adding a handle (Figures 11 and 12), a second blow mold that is used to compress both sides of the bottle and form a handle section (Figure 15), a mold punch that is used for cutting off the compressed portion of the handle section (Figure 17), and a conveyor which transports the molded PET bottle by clamping a neck portion in a mold that can be

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opened (Column 7, lines 32-33). The handle of the container created by the process of Uhlig does not employ the bonding apparatus required by claim 1 because when the flash in the compressed area is removed by the cutting apparatus of Uhlig, the seam is left bonded.

Mojonnier discloses that it is possible to create a handle in a container so that it is both liquid tight (Column 3, line 33) and comfortable to grip by leaving an elongated, unbonded flange in the handle area (Figure 2: 33b) that can be folded over while it is being bonded (Column 3, lines 41-45). Mojonnier does not disclose that the flanges be bonded by an insert injection mold, but does disclose that they can be bonded by "heat sealing, adhesive or the like" (Column 2, line 34), suggesting to one of ordinary skill in the art that any well known method of bonding flanges can be used.

Hagano discloses that it is well known to use a bonding apparatus for bonding ends of a cut-off portion ([0090]) of a blow-molded container in which both sides of the cut-off portion are compressed (Figure 9) and a resin is injected into a mold cavity to overmold the flanges and create a seal ([0090]). Therefore, it would have been obvious to one of ordinary skill in the art to make the handle of Uhlig more comfortable by adding the flanges disclosed by Mojonnier to the handle portion and then bonding them with the injection mold disclosed by Hagano.

Although Uhlig never explicitly states that the container be constructed of PET, such is well known in the art and would have been obvious to one of ordinary skill in the art at the time of the invention.

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In regards to claim 6, Uhlig discloses a method for manufacturing a PET bottle having a handle formed on a body (Figure 14) which comprises the steps of a first blowing operation performed in a blow mold to inflate an injection molded preform (Figures 11 and 12), a second blowing operation in which the container is further expanded by blow molding in a second mold that has a section for forming a handle in the container (Figure 15), and a cutting step in which a compressed portion of the handle section is cut off (Figure 17). The handle of the container created by the process of Uhlig does not employ the bonding apparatus required by claim 1 because when the flash in the compressed area is removed by the cutting apparatus of Uhlig, the seam is left bonded.

Mojonnier discloses that it is possible to create a handle in a container so that it is both liquid tight (Column 3, line 33) and comfortable to grip by leaving an elongated, unbonded flange in the handle area (Figure 2: 33b) that can be folded over while it is being bonded (Column 3, lines 41-45). Mojonnier does not disclose that the flanges be bonded by an insert injection mold, but does disclose that they can be bonded by "heat sealing, adhesive or the like" (Column 2, line 34), suggesting to one of ordinary skill in the art that any well known method of bonding flanges can be used.

Hagano discloses that it is well known to use a bonding apparatus for bonding the ends of a cut-off portion ([0090]) of a blow-molded container in which both sides of the cut-off portion are compressed (Figure 9) and a resin is injected into a mold cavity to overmold the flanges and create a seal ([0090]). Therefore, it would have been obvious to one of ordinary skill in the art to make the handle of Uhlig more comfortable by

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adding the flanges disclosed by Mojonnier to the handle portion and then bonding them with the injection mold disclosed by Hagano.

Although Uhlig never explicitly states that the container be constructed of PET, such is well known in the art and would have been obvious to one of ordinary skill in the art at the time of the invention.

5. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Shinichi et al. (Japanese Kokai JP8323845 already of record) in view of Uhlig (USP 3740181) and Hagano et al. (Pre-Grant Publication 2002/0125254) as applied to claims 1 and 6 above, and further in view of C. W. Hurst (USP 3499071).

In regards to claim 2, the previous combination does not disclose that the handle forming portion of the blow mold be configured to penetrate the body of the bottle upon compressing both sides of the bottle.

Hurst discloses a handle forming portion of a blow mold (Figure 3: 20) which is configured to penetrate the body of the bottle upon compressing both sides of the bottle (See finger grooves in Figure 1). Therefore, in order to mold the grooves taught by Hurst into the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the section of the blow mold which compresses that handle of the bottle also extend into the body of the bottle.

In regards to claim 11, the previous combination does not disclose that the handle forming portion of a third blow mold be configured to penetrate the body of the bottle upon in a handle forming area.

Hurst discloses a handle forming portion of a blow mold (Figure 3: 20) which is configured to penetrate the body of the bottle in the handle forming area (See finger grooves in Figure 1). Therefore, in order to mold the grooves taught by Hurst into the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to blow mold the formed containers in a mold which penetrates into the body of the container at the handle area.

6. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Shinichi et al. (Japanese Kokai JP8323845 already of record) in view of Uhlig (USP 3740181) and Hagano et al. (Pre-Grant Publication 2002/0125254) as applied to claims 1 and 6 above, and further in view of Martin et al. (USP 4320789).

In regards to claim 2, the previous combination does not disclose that the handle forming portion of the blow mold be configured to penetrate the body of the bottle upon compressing both sides of the bottle.

Martin discloses blow molding (Column 4, line 64) a container so that its seam is protected inside a recess in the container walls (Column 3, lines 13-21). Therefore, in

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order to protect the seam in the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the section of the blow mold which compresses that handle of the bottle also extend into the body of the bottle to create an indentation around the seam.

In regards to claim 11, the previous combination does not disclose that the handle forming portion of a third blow mold be configured to penetrate the body of the bottle upon in a handle forming area.

Martin discloses blow molding (Column 4, line 64) a container so that its seam is protected inside a recess in the container walls (Column 3, lines 13-21). Therefore, in order to protect the seam in the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to blow mold the formed containers in a mold which penetrates into the body of the container at the handle area to form an indentation around the seam.

7. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Uhlig (USP 3740181) in view of Mojonnier et al. (USP 3366290) and Hagano et al. (Pre-Grant Publication 2002/0125254) as applied to claims 1 and 6 above, and further in view of C. W. Hurst (USP 3499071).

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In regards to claim 2, the previous combination does not disclose that the handle forming portion of the blow mold be configured to penetrate the body of the bottle upon compressing both sides of the bottle.

Hurst discloses a handle forming portion of a blow mold (Figure 3: 20) which is configured to penetrate the body of the bottle upon compressing both sides of the bottle (See finger grooves in Figure 1). Therefore, in order to mold the grooves taught by Hurst into the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the section of the blow mold which compresses that handle of the bottle also extend into the body of the bottle.

In regards to claim 11, the previous combination does not disclose that the handle forming portion of a third blow mold be configured to penetrate the body of the bottle upon in a handle forming area.

Hurst discloses a handle forming portion of a blow mold (Figure 3: 20) which is configured to penetrate the body of the bottle in the handle forming area (See finger grooves in Figure 1). Therefore, in order to mold the grooves taught by Hurst into the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to blow mold the formed containers in a mold which penetrates into the body of the container at the handle area.

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8. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Uhlig (USP 3740181) in view of Mojonnier et al. (USP 3366290) and Hagano et al. (Pre-Grant Publication 2002/0125254) as applied to claims 1 and 6 above, and further in view of Martin et al. (USP 4320789).

In regards to claim 2, the previous combination does not disclose that the handle forming portion of the blow mold be configured to penetrate the body of the bottle upon compressing both sides of the bottle.

Martin discloses blow molding (Column 4, line 64) a container so that its seam is protected inside a recess in the container walls (Column 3, lines 13-21). Therefore, in order to protect the seam in the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the section of the blow mold which compresses that handle of the bottle also extend into the body of the bottle to create an indentation around the seam.

In regards to claim 11, the previous combination does not disclose that the handle forming portion of a third blow mold be configured to penetrate the body of the bottle upon in a handle forming area.

Martin discloses blow molding (Column 4, line 64) a container so that its seam is protected inside a recess in the container walls (Column 3, lines 13-21). Therefore, in order to protect the seam in the handle of the bottle disclosed by the previous combination, it would have been obvious to one of ordinary skill in the art at the time of

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the invention to blow mold the formed containers in a mold which penetrates into the body of the container at the handle area to form an indentation around the seam.

9. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Shinichi et al. (Japanese Kokai JP8323845 already of record) in view of Uhlig (USP 3740181) and Hagano et al. (Pre-Grant Publication 2002/0125254) as applied to claims 1 and 6 above, and further in view of Fischer et al. (USP 4123217).

In regards to claim 3, the previous combination does not disclose that the mold punch has a heater installed on an end of the mold punch.

Fischer discloses installing a heater at the end of the mold punch (Column 2, line 65) for the benefit of allowing a cooled blow mold to be used which creates a cleanly-formed handle region (Column 2, lines 66-68). Although Fischer is concerned with punching a handle into a parison that has already been heat bonded within the handle region, one of ordinary skill in the art at the time of the invention would have been motivated to apply the teachings of Fischer to the cutting step disclosed by Shinichi for the benefit of creating a clean shear in the handle area, preventing any stretching or deformation of the parison which might otherwise occur.

In regards to claim 8, the previous combination does not teach that use of a mold punch having a heater installed on its end when the parison is thick.

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Fischer discloses installing a heater at the end of the mold punch (Column 2, line 65) for the benefit of allowing a cooled blow mold to be used which creates a cleanly-formed handle region (Column 2, lines 66-68). Although Fischer is concerned with punching a handle into a parison that has already been heat bonded within the handle region, one of ordinary skill in the art at the time of the invention would have been motivated to apply the teachings of Fischer to the cutting step disclosed by Shinichi for the benefit of creating a clean shear in the handle area, preventing any stretching or deformation of the parison which might otherwise occur.

It is the examiner's position that it is obvious to use the heated press disclosed by Fischer for essentially any container thickness. The thickness of the container is a design choice that one of ordinary skill in the art at the time of the invention would have modified to adjust the aesthetics and structural strength of the container.

10. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Uhlig (USP 3740181) in view of Mojonnier et al. (USP 3366290) and Hagano et al. (Pre-Grant Publication 2002/0125254) as applied to claims 1 and 6 above, and further in view of Fischer et al. (USP 4123217).

In regards to claim 3, the previous combination does not disclose that the mold punch has a heater installed on an end of the mold punch.

Fischer discloses installing a heater at the end of the mold punch (Column 2, line 65) for the benefit of allowing a cooled blow to be used which creates a cleanly-formed

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handle region (Column 2, lines 66-68). Although Fischer is concerned with punching a handle into a parison that has already been heat bonded within the handle region, one of ordinary skill in the art at the time of the invention would have been motivated to apply the teachings of Fischer to the cutting step disclosed by Mojonnier for the benefit of creating a clean shear in the handle area, preventing any stretching or deformation of the parison which might otherwise occur.

In regards to claim 8, the previous combination does not teach that use of a mold punch having a heater installed on its end when the parison is thick.

Fischer discloses installing a heater at the end of the mold punch (Column 2, line 65) for the benefit of allowing a cooled blow mold to be used which creates a cleanly-formed handle region (Column 2, lines 66-68). Although Fischer is concerned with punching a handle into a parison that has already been heat bonded within the handle region, one of ordinary skill in the art at the time of the invention would have been motivated to apply the teachings of Fischer to the cutting step disclosed by Mojonnier for the benefit of creating a clean shear in the handle area, preventing any stretching or deformation of the parison which might otherwise occur.

It is the examiner's position that it is obvious to use the heated press disclosed by Mojonnier for essentially any container thickness. The thickness of the container is a design choice that one of ordinary skill in the art at the time of the invention would have modified to adjust the aesthetics and structural strength of the container.

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11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinichi (already of record) in view of Hagano et al. (Pre-Grant Publication 2002/0125254).

In regards to claim 22, Shinichi discloses the need to bond a cut-off portion remaining in a handle section (Figure 14) for manufacturing a bottle having a handles formed on a body (Figure 14). The apparatus of Shinichi discloses ultrasonic welding of a pre-fabricated seal (Figure 14: 102).

Hagano discloses that it is well known in the art to bond the seam on a blow molded container by compressing both sides of an intermediate portion of the cut-off parison in a mold cavity (Figure 9) and then overmolding the seam by injection a resin into the mold cavity ([0090]). Therefore, because the bonding method disclosed by Hagano is well known and would save both processing time and the need for two separate machines that mold then bond the handle, one of ordinary skill in the art at the time of the invention would have found it obvious to use the injection mold of Hagano to bond the container of Shinichi. The apparatus is capable of performing applicant's intended use of bonding a PET bottle.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mojonnier et al (USP 3366290) in view of Hagano et al. (Pre-Grant Publication 2002/0125254).

In regards to claim 22, Mojonnier discloses the need to bond a cut-off portion remaining in a handle section (Column 3, lines 41-45) for manufacturing a bottle having a handles formed on a body (Figure 2). Mojonnier does not specifically disclose using injection molding to do the bonding but does suggest to one of ordinary skill in the art that any of a variety of known bonding apparatuses can be utilized (Column 2, lines 33-34).

Hagano discloses that it is well known in the art to bond the seam on a blow molded container by compressing both sides of an intermediate portion of the cut-off parison in a mold cavity (Figure 9) and then overmolding the seam by injection a resin into the mold cavity ([0090]). Therefore, because the bonding method disclosed by Hagano is well known, one of ordinary skill in the art at the time of the invention would have found it obvious to use it to bond the container disclosed by Mojonnier. The apparatus is capable of performing applicant's intended use of bond a PET bottle.

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinichi et al (already of record) in view of Hagano et al. (Pre-Grant Publication 2002/0125254).

In regards to claim 23, Shinichi discloses the need to bond a cut-off portion remaining in a handle section (Column 3, lines 41-45) for manufacturing a PET ([0004]) bottle having a handles formed on a body (Figure 2). In the process of Shinichi, a seal (figure 14: 102) is prefabricated ([0099]) and then welded to the bottle ([0100]).

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Hagano discloses that it is well known in the art to bond the seam on a blow molded container by compressing both sides of an intermediate portion of the cut-off parison in a mold cavity (Figure 9) and then overmolding the seam by injection a resin into the mold cavity ([0090]). The injection mold of Hagano would prevent the need to have two separate pieces of equipment to bond the handle, one for molding the seal and the other for welding it. Therefore, in order to save process times and equipment costs, one of ordinary skill in the art at the time of the invention would have found it obvious to use the injection molding step disclosed by Hagano to bond the handle disclosed by Shinichi.

14. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mojonnier et al (USP 3366290) in view of Hagano et al. (Pre-Grant Publication 2002/0125254) and Matsui (USP 5874141).

In regards to claim 23, Mojonnier discloses the need to bond a cut-off portion remaining in a handle section (Column 3, lines 41-45) for manufacturing a bottle having a handles formed on a body (Figure 2). Mojonnier discloses that a variety of materials can be used to create the container (Column 2, line 2) and does not specifically disclose using injection molding to do the bonding but does suggest to one of ordinary skill in the art that any of a variety of known bonding apparatuses can be utilized (Column 2, lines 33-34).

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Matsui discloses the use of PET for making containers for the benefit of the product being transparent (Column 1, lines 23-25)

Hagano discloses that it is well known in the art to bond the seam on a blow molded container by compressing both sides of an intermediate portion of the cut-off parison in a mold cavity (Figure 9) and then overmolding the seam by injection a resin into the mold cavity ([0090]). Therefore, in order to form a transparent container with a bonded handle, one of ordinary skill in the art at the time of the invention would have found it obvious to use PET as a starting material (as taught by Matsui) in the process disclosed by Mojonnier and then bond the handle portion of the formed container with the injection molding process disclosed by Hagano.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN ROGERS whose telephone number is 571-270-7002. The examiner can normally be reached on Monday through Thursday, 7:30 to 5:00, and every other Friday, 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR

/Richard Crispino/
Supervisory Patent Examiner, Art Unit 1791